(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
11 April 2002 (11.04.2002)

PCT

(10) International Publication Number
WO 02/29508 A2

(51) International Patent Classification[7]: G06F

(21) International Application Number: PCT/IB01/02766

(22) International Filing Date: 2 October 2001 (02.10.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/676,979 2 October 2000 (02.10.2000) US

(71) Applicants and
(72) Inventors: **SOH, Teong, Gee** [SG/SG]; 275A 6th Avenue, Dynasty Garden II, Singapore 276564 (SG). **LEE, Swee, Hoong** [MY/MY]; 275A 6th Avenue, Dynasty Garden II, Singapore 276564 (SG).

(74) Agents: **DAVIS, Peter, J.** et al.; Morrison & Foerster LLP, 2000 Pennsylvania Avenue, N.W., Washington, DC 20006-1888 (US).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *without international search report and to be republished upon receipt of that report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 02/29508 A2

(54) Title: BROKER-MEDIATED ONLINE SHOPPING SYSTEM AND METHOD

(57) Abstract: An online shopping system and method that facilitates the purchase of products and services through a broker via a distributed network such as the Internet, cable television network, or wireless communication system. A shopper views original online merchant network site content through a browser on a network site provided by the broker, for example product information featured by each online merchant site, and stores the gathered product information at the broker network site, without leaving the broker network site. The shopper places a consolidated order with the broker by selecting from the stored list of product information and pays the broker, who processes the shopper payment, freeing the shopper from having to order from and pay the merchants individually. The broker, acting as the purchasing agent for the shopper, automatically places the corresponding orders and arranges shipping with the sereval merchants upon receipt and authentication of payment in full for the consolidated order by the shopper. The broker is responsible to the shopper for the delivery of the products and services to the shopper's satisfaction and to the merchant for payment of the purchased products and services.

BROKER-MEDIATED ONLINE SHOPPING SYSTEM AND METHOD

TECHNICAL FIELD OF THE INVENTION

The present invention relates to a system and method for effecting purchases over a distributed network such as the Internet through the intermediary of a broker, and more particularly to an online shopping system and method wherein shoppers access pre-qualified merchant network sites through a network site administered by the broker.

BACKGROUND OF THE INVENTION

This invention relates to problems plaguing online shoppers and merchants around the world today, which are limiting the full potential of distributed networks such as the Internet as a new channel for international commerce. There is still widespread fear with online buying and selling. Shoppers are still staying away from online shopping because of their many concerns, including, for example: abuse of privacy, fraudulent use of their credit cards, lack of alternate payment methods, lack of convenience with online shopping, especially shopping from multiple merchants, lack of assurance on product delivery, high shipping costs, poor customer service and constant fear of fake merchants, particularly foreign-based merchants where avenues of legal recourse for the defrauded or unsatisfied customer are limited and difficult.

For the merchants, the foremost concern is credit card fraud. Many merchants limit their sales and shipments to only certain markets. Some merchants insist on a secured payment method such as a money order, bank draft or telegraphic transfer, thereby increasing the cost and inconvenience to genuine shoppers. Accordingly, several broker-

mediated or intermediary services have been patented and implemented on the Internet in an attempt to alleviate one or another of these problems, but none has eliminated all of the aforementioned problems and inconveniences associated with online shopping.

Some online network sites such as Amazon.com "host" other merchants on a single network site, or provide merchants with direct links to a single network site which is part of the same logical network of the host. A shopper may use the Amazon.com shopping cart to purchase the products of various merchants, but the shopper may have to pay a merchant directly, unless the merchant accepts an Amazon.com payment transaction arrangement. Moreover, it is left to individual merchants to arrange deliveries. Such "guest" merchants may benefit from the host's shopping services and tools, such as a shopping cart system, payment authentication, and collection system. However, a significant drawback to such "host" network sites is that, while the vast majority of merchants still prefer to host their own World Wide Web sites on the Internet, they cannot benefit from the services and tools offered by the host unless they are a part of the host's logical network system. As independent merchant network sites continue to proliferate on the Internet, shoppers and merchants continue to face considerable inconveniences and increased risks, as described above.

One automated broker-mediated approach is the subject of U.S. Patent No. 5,815,665, which deals primarily with the problem of sensitive data required for user authentication and billing over un-trusted public network such as the Internet. This brokering service also features user access to one service provider after another with a single password log-in and centralized billing of users. However, the '665 patent is restricted to purchases of online electronic services such as software. It is also not geared

to deferred purchases of such services, that is, it does not allow users to select and store their desired services for future purchase consideration. Moreover, it does not permit the buyer to consolidate desired services from several service providers into a single consolidated order. Moreover, the broker in the '665 patent does not process the buyer's order or arrange delivery thereof, nor does the broker accept responsibility for the buyer's satisfaction with the delivered services.

Another automated broker-mediated approach is disclosed in U.S. Patent No. 5,890,137. However, the system and method disclosed therein require separate networks for shopping and payment and do not appear to include a universal shopping cart. Moreover, personal shopper data is transmitted from a service center to individual merchants, which themselves handle all details of shipping.

Other intermediary systems like SNAZ.com offer a "universal" shopping cart that allow users to shop from across distinct merchant network sites. It also allows users to store selected merchandise for future purchase. Although shoppers have realized a certain benefit in their online shopping experience from this development, SNAZ.com still forwards each shopper's personal information to each merchant whose products the shopper orders, and the shopper must deal directly with the merchants in the event of dissatisfaction with delivery or quality of the received products. This type of intermediary system does not authenticate payment, process any orders or provide any direct customer service. A similar concept is disclosed in U.S. Patent 6,101,482.

A type of universal shopping cart system is disclosed in U.S. Patent No. 5,966,697, (the "'697 patent") in which a shopper may directly access the online stores of a sequence of merchants connected to a network, select items therefrom for purchase, and subsequently

process payment for the selected items through the intermediary of a secure central checkout processing computer connected to the network. The order information may either be stored sequentially in the memory of each merchant's computer, or in the memory of the shopper's computer, or in the memory of the checkout processing computer. In the '697 patent, however, the shopper's identity is known to each merchant from whom the shopper purchases an item, shipping is direct from each merchant to the shipper, and no means for tracking an order is suggested. The lack of privacy in such a system is a significant concern for shoppers, as is the inability to track shipments once an order is placed with a merchant. Moreover, since the automated intermediary in this reference accepts no liability for non-payment, non-delivery, or defective merchandise, both merchants and shoppers assume significant risk and must negotiate directly with each other in the event of a problem.

There are many intermediary-type services on the Internet today such as Bookfinder.com and Dealtime.com, which provide search and price comparison, and directory services such as Hotbar.com that merely direct shoppers to individual merchants. They do not authenticate payment, process orders, arrange delivery or assure delivery.

Moreover, every market around the world is unique and different in its own ways, depending on the stage of development within each society of the business infrastructures and legal system. For example, credit card payment is not the preferred payment method in many parts of the world. Also, the level of expectations for product delivery and customer service can be quite different in different countries. Moreover, products that are legal in one market may be banned in another, including, for example, electronic devices such as automobile radar detectors, night vision binoculars, and other products subjected to export restrictions, import taxes, duties and/or import permit requirements.

In addition, many online merchants have learned that offering competitive shipping costs is just as important as offering a competitive base price for the product itself in closing a deal with an online shopper. Many studies have shown that some shoppers change their mind prior to effecting an online purchase because they find the shipping fees excessive. Nevertheless, most online merchants do not have sufficient transaction volume to leverage their customer base to obtain better shipping rates from shipping agents, particularly international shipping concerns.

Other complaints often made against online merchant systems of the prior art involve the inconsistent and generally slow performance of online merchants in delivering products to their customers, particularly customers in countries other than that in which the merchant is domiciled. In an attempt to attract customers, many online merchants have partly, and sometimes entirely absorbed the shipping costs. This has generally had the effect, however, of netting significant financial losses for the online merchant but generally insignificant gains in customer base.

Therefore, for global electronic commerce to prosper, there is needed a complete, yet adaptable system that combines the convenience of online shopping, a flexible payment collection system, assured delivery, lower delivery costs through leveraging on volume, and improved customer service. Such a system would increase business for all legitimate online merchants while encouraging would-be online shoppers everywhere around the world to participate in online shopping with greater confidence.

SUMMARY OF THE INVENTION

The invention includes a broker-mediated online shopping method. In one embodiment, the method comprises providing access to a broker network site through a distributed network to enable viewing of first content on the broker network site, providing access to at least one merchant network site through the broker network site to enable viewing on the broker network site of second content from the at least one merchant network site, gathering and storing selectively from the first content and the second content first information regarding a first at least one product, receiving a first order for a second at least one product based at least in part on the first information, receiving payment for the first order and assuming responsibility for completion of the first order, generating and placing at least one purchase order based on the first order for a first at least a portion of the second at least one product and assuming responsibility for payment of the at least one purchase order, receiving second information regarding fulfillment of the at least one purchase order, providing third information based on the second information regarding fulfillment of the first order, receiving fourth information regarding shipment of a second at least a portion of the second at least one product, updating based on fifth information provided by at least one shipper a delivery status for the second at least a portion of the second at least one product, providing sixth information regarding the delivery status, and effecting payment for the at least one purchase order.

In one aspect of the embodiment, each of the broker network site and the at least one merchant network site is an Internet web site and the distributed network is the Internet.

In one aspect of the embodiment, the providing access to the at least one merchant network site includes requiring log-in by a shopper to the broker network site only once during an interaction session between the shopper and the broker network site.

In a further aspect of the embodiment, the shopper provides personal information only to the broker network site and remains anonymous to the at least one merchant network site.

In one aspect of the embodiment, the first content is based at least in part on the second content.

In one aspect of the embodiment, the first content includes a shopping list.

In one aspect of the embodiment, the first content includes the third information and the sixth information.

In one aspect of the embodiment, the first information comprises a first at least one embedded universal resource locator (URL) corresponding uniquely to the first at least one product.

In one aspect of the embodiment, the gathering and storing first information comprises capturing the first at least one embedded URL and storing the first at least one embedded URL in a storage device.

In a further aspect of the embodiment, the storage device is a database controlled by the broker network site.

In one aspect of the embodiment, the first order includes a second at least one embedded URL corresponding to the second at least one product.

In one aspect of the embodiment, the at least one purchase order comprises a third at least one embedded URL corresponding to the first at least a portion of the second at least one product.

In one aspect of the embodiment, the method further comprises generating an invoice corresponding to the first order with an invoice identification code corresponding uniquely to the first order.

In a further aspect of the embodiment, the generating an invoice includes calculating estimated local taxes, duties, and shipping costs in a local currency.

In one aspect of the embodiment, the payment for the first order is received through the distributed network.

In one aspect of the embodiment, the payment for the first order is received through an offline payment processing center.

In a further aspect of the embodiment, the payment is received in a local currency.

In one aspect of the embodiment, the fourth information includes a tracking number corresponding to the second at least a portion of the second at least one product.

In one aspect of the embodiment, the fifth information includes a first update on a time dependent position of the second at least a portion of the second at least one product.

In one aspect of the embodiment, the at least one shipper receives the second at least a portion of the second at least one product from the at least one merchant network site.

In a further aspect of the embodiment, the at least one shipper delivers the second at least a portion of the second at least one product to a shopper at an address specified by the shopper.

In a further aspect of the embodiment, the at least one shipper delivers the second at least a portion of the second at least one product to at least one local shipper for subsequent delivery by the at least one local shipper to a shopper at an address specified by the shopper.

In one aspect of the embodiment, the sixth information includes a second update on a time dependent position of the second at least a portion of the second at least one product.

In one aspect of the embodiment, the method further comprises evaluating the second information, requesting first instructions in response to the third information, and providing second instructions based on the first instructions.

In one aspect of the embodiment, the effecting payment comprises calculating a first at least one amount owed to the at least one merchant in a first local currency corresponding to the at least one merchant and a second at least one amount owed to the at least one shipper in a second local currency corresponding to the at least one shipper, checking at least one bank balance corresponding to the broker network site and generating a first at least one payment schedule corresponding to the first at least one amount owed and a second at least one payment schedule corresponding to the second at least one amount owed, approving the first at least one payment schedule and the second at least one payment schedule, and transferring a first at least one payment to the at least one merchant and a second at least one payment to the at least one shipper.

In one aspect of the embodiment, the method further comprises receiving an automatic update regarding at least a portion of the second content, modifying at least a portion of the first content corresponding to the at least a portion of the second content, and providing an alert regarding the modified at least a portion of the first content.

The invention includes a broker-mediated online shopping system. In one embodiment, the system comprises a broker network site having a broker network server operably coupled to a broker application server and to a broker storage device operably coupled to the broker application server, an access rights application executable by the broker application server for controlling access to the broker network site and for providing, to a shopper logged in to the broker network site through a distributed network,

access to first content from a first at least one merchant network site displayed on the broker network site and to second content displayed on the broker network site, wherein the second content is based at least in part on the first content, a shopping cart application executable by the broker application server for selecting first product information from the first content and second product information from the second content and for storing the selected first product information and the selected second product information in a shopping list in the broker storage device, an order processing application executable by the broker application server for processing a first order received from the shopper through the distributed network and at least one second order based on the first order placed by the broker network site with a second at least one merchant network site through the distributed network, a payment processing application executable by the broker application server for processing a first payment received from the shopper, at least one second payment to the second at least one merchant network site, and at least one third payment to at least one shipper, an order tracking application for monitoring and updating a first status of the first order and a second status of each at least one second order in response to first information received from the second at least one merchant site and second information received from the at least one shipper, a tax and duty calculation application for calculating an amount of taxes, duties, and tariffs applicable to the first order, at least one shopper browser in communication with the broker network site through the distributed network, and first broker software executable on a computer system and operably coupled to the at least one shopper browser for processing first data, wherein the at least one merchant network site comprises a merchant network server operably coupled to a merchant application server, to a merchant storage device operably coupled to the merchant application server, and to second broker software executable on a computer system for processing second data.

In one aspect of the embodiment, the shopping cart application captures a first embedded universal resource locator (URL) from the first content and adds the first embedded URL to the shopping list.

In one aspect of the embodiment, the shopping cart application captures a second embedded universal resource locator (URL) from the second content and adds the second embedded URL to the shopping list.

In one aspect of the embodiment, the shopper provides personal information only to the broker network site and remains anonymous to the at least one merchant network site.

In one aspect of the embodiment, the first order is based on the shopping list.

In one aspect of the embodiment, the broker storage device is a database.

In one aspect of the embodiment, the first payment is received through the distributed network.

In one aspect of the embodiment, the first payment is received through an offline payment processing center.

In a further aspect of the embodiment, the offline payment processing center is an authorized broker outlet.

In a further aspect of the embodiment, the offline payment processing center is a self-service ATM terminal.

In one aspect of the embodiment, the first payment is in a local currency chosen by the shopper.

In one aspect of the embodiment, the second content includes third information regarding the first order and fourth information regarding completed shopper orders previously processed by the broker network site.

In a further aspect of the embodiment, the first order is based at least in part on the fourth information.

In a further aspect of the embodiment, the third information includes the first status.

In one aspect of the embodiment, the system further comprises a product update application for processing updated first product information received from the at least one merchant site.

In a further aspect of the embodiment, the product update application automatically updates the shopping list.

The invention also includes a computer-readable medium including instructions for enabling a method of broker-mediated online shopping.

The invention also includes a computer implemented method of broker-mediated online shopping.

BRIEF DESCRIPTION OF THE DRAWINGS

Embodiments of the invention will now be described by way of example with reference to the drawings in which:

Figure 1 shows an embodiment of the broker-mediated purchasing system according to the present invention.

Figure 2 shows an overview of an exemplary online shopping process according to the method of the present invention.

Figure 3 shows an embodiment of a process illustrating the use of the universal shopping card and shopping list.

Figure 4 shows an embodiment of a process whereby a shopper places an order.

Figure 5 illustrates an embodiment of a process whereby a broker order is amended and/or cancelled and/or continued and completed.

Figure 6 shows an embodiment of a process whereby products are delivered from a merchant to the shopper.

Figure 7 shows an embodiment of a process whereby the broker pays merchants and shippers.

Figure 8 shows an embodiment of a process whereby the shopper shopping list, including product items under separate categories, is updated automatically in response to product information supplied by merchants.

DETAILED DESCRIPTION OF THE INVENTION

The present invention is generally directed to an online shopping system and method that enables online shoppers and merchants to transact through an online broker

network site over a distributed network such as the Internet, cable television network, and wireless communication systems. The broker, a trusted third party, provides services that allow shoppers to conveniently, securely, and anonymously effect purchases and allow merchants operating network sites to safely effect sales, wherein registered shoppers access and shop at registered merchant network sites through a network site administered by the broker, who implements the online brokering service.

According to the invention, a registered shopper uses broker services to view original online registered merchant network site content over a distributed network such as the Internet, gather product information from various merchant network sites and store the product information in a database maintained by the broker network site. A shopper may be any person or business entity who obtains products and/or services from a provider of products and/or services. "Shopper" and "user" are used interchangeably herein. To make a purchase, the shopper uses the broker services to place an order with the broker, which may be a consolidation of orders for products offered by several distinct merchants, and pay the broker, who processes the shopper order and payment, without having to order from or pay the merchants individually. Moreover, the broker, acting as purchasing agent for the shopper, automatically places independent orders with the several merchants corresponding to individual orders in the consolidated order by the shopper, and arranges the shipping of the orders to the shopper. The broker assumes responsibility to the shopper for delivery and satisfaction of the delivered products and services and to the merchant for payment of each order.

The offered brokering services enable shoppers to centrally manage their online shopping and effect transactions, eliminating the need to shop, buy, and deal separately

with distinct online merchants. The broker network site provides a "one stop shopping" experience for registered shoppers, including, for example: the ability to create and maintain a personalized shopping list of all product information gathered from the several registered online merchants; a single, consolidated, multi-merchant order with a single payment by the shopper; and tracking of deliveries of products from multiple merchants. This "one stop shopping" is provided through a single broker network site, eliminating the need for shoppers to manage a plethora of single merchant shopping lists, place separate orders with separate merchants, and deal with each merchant directly.

In addition, the offered brokering services provide registered merchants a single source to obtain sales orders, receive payment, and assist with all delivery arrangements, thus eliminating the need for the registered merchants to install expensive systems that allow secure, multi-currency payment collection and provide secure storage of personal data provided by shoppers. Moreover, merchants do not need to negotiate with different shippers or handle individual shopper orders or complaints. A significant benefit of the invention is that the broker, not the merchants, is ultimately responsible for the payment and delivery risks. The broker, as the trusted third party, is responsible to the shoppers for their purchases and to merchants for the sales orders that the broker places. The broker also responds to any consumer dissatisfaction and intervenes in any disputes that may occur between merchant and shopper. For example, the broker may arrange a repair, refund, or exchange for a product ordered through the broker-mediated transaction system of the invention.

The broker-mediated online shopping system of the present invention enables shoppers to use popular local and national secured consumer payment instruments available

around the world, such as checks, ATM cards, stored value cards, Internet banking, cash, etc., in addition to international credit cards such as VISA and MasterCard, to effect online and offline payment to the broker for their international online shopping. For example, shoppers in Singapore can use ATM cards issued by several local banks under the Network Electronic Transaction System (NETS) to pay into a local broker bank account for all their online purchases. Dedicated NETS EFTPOS (Electronic Funds Transfer Point Of Sale) terminals at offline payment processing centers such as authorized broker outlets and self-service ATM terminals can process shopper ATM payments offline. In addition, shoppers in many parts of the world may also use internet banking facilities available locally in their country to pay into a local broker bank account for their international purchases. These payment devices and methods are referred to hereinafter as "payment gateways."

Figure 1 diagrammatically illustrates an embodiment of the broker-mediated purchasing system according to the present invention. The system includes at least one registered shopper 120, a broker network site 100, at least one shipper 130 providing delivery services from registered merchants to the registered shopper 120 at an address designated by the shopper, and at least one merchant site 140 corresponding to a registered merchant for displaying online the registered merchant's products and services for sale. The network sites may be any distributed network sites, for example, Internet web sites or sites accessible by wireless telephone. The shoppers 120, broker network site 100, merchant sites 140 and shippers 130 all communicate through a distributed network 125 such as the Internet, wireless telephone network, cable television network, intranet, etc. via network links well known in the art. The system also includes payment gateways 180 which allow shoppers to make payments to the broker network site. The system may also include a

shopper's bank 160, which may be in communication with a broker's bank 165 through a micropayment network 150, and may also include a merchant's bank 170 and a shipper's bank 175, both of which may be in communication with the broker's bank 160 through a commercial payment network 155. The particular implementations of the micropayment and commercial payment networks 150 and 155, respectively and, payment clearing agencies or payment gateways, 180 of which many are known in the art, will not be described further.

The broker network site 100 comprises a network server 105, a broker application server 110, and a broker database 115. The broker network site interacts with elements of the system external to the site 100 through the network server 105. The network server 105 displays broker site content, for example, in the form of a graphical user interface (GUI) such as a web page, in a manner known in the art. Examples of broker site content include shopper and merchant registration GUIs, shopper and merchant registration information, shopper shopping list and payment information, order tracking information, etc. The broker network server 105 also provides access for the shopper 120 to the merchant network sites 140, in a manner described in further detail below. The broker network server 105 is operably coupled to a broker application server 110, which stores and executes a number or computer-readable application programs which perform the specialized broker services described herein. These applications include the following: shopper and member registration application; shopping cart application; order processing application; payment processing application; delivery status (order tracking) application; access rights verification application; service request application; product update application, cookies application, report generator application, and tax and duty calculation application. The

application server 110 and network server 105 are operably coupled to the broker database 115. The database 115 is a store for data records containing, for example: registration information for registered shoppers 120 and merchants 140; shopping or wish list (described in greater detail below); orders placed by shoppers 120 and corresponding orders placed by the broker network site 100 on behalf of the shoppers; shippers 130; banks 160, 165, 170, and 175; contracts between the broker network site 100 and merchants 140 and between the broker network site 100 and shippers 130; shipping data, including shipping zones and rates; foreign exchange rate and provider data; order tracking numbers; and tax and duty schedules.

The shopper 120 accesses the broker network site 100 through a computer or wireless telephone which supports a suitable browser 121. The broker network server 105 together with software components 144 provided by the broker and installed at the merchant network sites 140 enable the shopper to view content and add items selected from the merchant network sites 140 to his or her shopping list stored in the broker database 115 at the broker network site 100. In addition, the broker network server 105 enables the shopper to view the content of a merchant network site through the broker network site, for example as a web page, and simultaneously view a broker menu bar on a fixed frame within the web page view, as known in the art. The broker menu bar frame provides the shopper quick access to various broker services using icons and/or drop-down menus. For example, each icon may symbolize a shopping category within the shopper's personalized shopping list which the shopper may access quickly by clicking on the icon or menu.

In a preferred embodiments when the shopper selects a product for addition to his or her shopping list, the shopping cart gathers the embedded URL of the product information

and stores it in the database 115. The shopper selects the product by placing a cursor over the desired product icon on the merchant frame and performs a prescribed mouse and/or keystroke combination, for example holding down the 'shift' key and clicking the left hand button on the mouse. The shopper then moves the cursor over the shopping category icon on the broker frame and performs another mouse and/or keystroke combination to download the product source along with other information required for future order processing to his or her shopping list.

Furthermore, the shopper may store in his or her shopping list the same product information under several different personalized categories without re-activating the shopping cart function of gathering the product URL; the shopper may simply place the cursor over a different category on the broker frame and perform a prescribed mouse and/or keystroke sequence. Similarly, the shopper may arbitrarily move the product information from one category to another to personalize his or her shopping list.

The software component 122 installed on the shopper computer or wireless telephone enables the broker to detect and direct the registered shopper to perform a log-in when the shopper is browsing a registered merchant site or when a registered shopper performs a prescribed mouse and/or keystroke combination in an attempt to gather product information from a registered merchant network site.

A merchant network site 140 communicates with the broker network site 100, shoppers 120, and shipper 130 through the distributed network 125, accessed by means of a suitable network server 141. The merchant network server 141 is operably coupled to a merchant application server 142, which stores and executes a number of computer readable applications, and customized broker software components 144 which are designed to be

compatible with a wide array of different merchant network site system platforms, design architectures, and security requirements and installed during the merchant registration process. The merchant network server is also operably coupled to the database 143. The broker network site 100 and the customized software component 144 installed on the merchant network site 140 provide a varying degree of connectivity and transaction data exchange capability between the broker network site 100 and the merchant network site 140, including the database 143. The database 143 stores information such as merchant product information and possibly other relevant information that may help improve overall cost calculations and service levels, for example, inventory details, physical product attributes for more precise shipping cost calculations, and actual shipping points or origin, as merchant may ship products from facilities located in another country. A shipper 130 communicates with the broker network site 100, shoppers 120, and merchant network sites 140 through the distributed network 125, which the shipper accesses by means of a suitable network server 131.

In operation, the system and method of the present invention allow registered shoppers 120 to access and shop at the broker network site 100 and at different merchant network sites through the broker's network site, using a single account to which access is protected, for example, by username and password verification or other suitable means, established between the shopper and the broker. A registered shopper accessing the broker network site 100 may view broker content, which may feature information, for example text, drawings, photos, prices, and option information such as available sizes and colors, describing selected products from registered merchants, and may further select one or more products from among those featured at the broker site to add them to his or her personalized

shopping list. In addition, the shopper may access a plurality of registered merchant network sites 140 through the broker network site 100, whereby the shopper may view content on each of the merchant sites in turn, including product information similar to that featured on the broker site 100, and select one or more products of interest from each of the merchant sites. An access rights application in the broker application server 110 controls shopper access to the broker network site 100 and permits shopper access to merchant network sites 140, which may be protected, after login in to the broker network site 100 without requiring the shopper to log in separately at each merchant site. Products selected in this manner are stored in the shopper's dedicated shopping list, which is a data record stored in the broker database 115.

Figure 2 provides an overview of an exemplary shopping process according to the method of the present invention. At 200, a previously registered shopper 120, using the browser 121 in cooperation with the broker software component 122, accesses the broker network site 100 through the distributed network 125. Shopper registration techniques are well known in the art and will not be described herein in great detail. An exemplary shopper registration process may be summarized as follows: A prospective member shopper accesses the broker site 100 and is prompted to register with the broker service. The prospective member shopper then chooses a username and a password for subsequent verification during log-in and completes a shopper profile containing pertinent information such as name, identity card and/or driver license number, passport number, billing address, preferred shipping addresses, including addresses of persons or businesses to which the shopper expects to require delivery of products ordered, and payment information, for example credit card, debit card, and/or bank account numbers. The prospective member

shopper is prompted to assign nicknames or mnemonic identifiers to important information such as credit card numbers and shipping addresses. All profile information obtained from the prospective member shopper is preferably transmitted via a secure Internet connection, using known encryption technology, and stored as a record in the broker database 115. Registered shoppers may subsequently view their profile information and modify it as needed through the broker network site 100. Subsequently, when placing orders through the broker network site, the registered shopper may use the identifiers associated with data in their profiles to reference information, such as credit card numbers and addresses, already provided to the broker site 100 and stored in the database 115, thereby reducing the need to transmit such sensitive personal information repeatedly over the distributed network connection and increasing security. The shopper's personal information is secured and maintained in the broker database 115 and is not revealed to merchants. As part of the registration process, broker software 121 is installed on the device used by the shopper to access the broker network site, for example a personal computer or wireless phone.

To access the broker network site services, the shopper is required to log in by providing, for example, a username and password which are subsequently verified, only once in each session of interaction with the broker network site. Thereafter, all brokering services, for example, viewing one's shopping list, checking delivery status, adding products of interest from separate merchant network sites to one's personalized shopping list, are accessible by the shopper without logging in a second time. An interaction session between the shopper and the broker network site ends when the shoppers logs out from the broker network site.

The shopper can also log in to the broker network site at any time at his or her initiative, or when prompted by the broker registration application, for example, upon an attempt to access a registered merchant network site that is password protected, or upon an attempt to gather product information from the broker or merchant network sites, or attempting to access personalized services such as the shopping list. The client software component installed by the broker on the shopper's browser will be able to detect any such attempts to log in and respond with a graphical user interface (GUI), for example a web page, that allows the shopper to log in. The shopper may choose to ignore such a prompt, but as a consequence access to brokering services will be denied.

Merchants whose network sites 140 are featured by the broker network site 100 also register with the broker network site 100. The broker who operates the broker network site 100 investigates a merchant before allowing the merchant to complete the registration process. Prospective merchants provide the broker with relevant information on their businesses, including software systems utilized and financial institutions to which payments are to be made. The merchant also executes a contractual agreement with the broker detailing the terms and conditions pertaining to the various responsibilities and obligations of both parties, for example with regard to terms of payment, handling of returns, refunds, warranties and settling of disputes. As part of the registration process, broker software components 144 are installed on the device used by the merchant to access the broker network site, typically a personal computer or server.

At 205, the shopper browses the broker site, viewing broker network site content, and, in this example, additionally browses several merchant sites 140. The shopper in this example selects one or more products from each of the sites browsed. (The shopper may,

of course, select as many or as few, including zero, products from each site as desired.) The broker network site content may include varied information, for example a product search and price compare mechanism, an online showcase of selected products and advertisements from registered merchants, an online directory of registered merchants categorized by their products and services, merchant locations (for example local, regional, international) to provide shoppers further convenience with online shopping, etc.

According to the present invention, the broker network site 100 provides a centralized service mechanism for registered shoppers to manage requests for merchant service updates (for example, sale notices, special discounts, etc.) in total anonymity from the merchants. The broker network site stores shopper-specific service requests relating to preferred merchants, and the broker software component 144 installed at the merchant network site automatically routes service updates to the broker network site. A broker merchant service request application resident on the broker application server 110 then matches incoming service updates from merchant network sites 140 against a service requests registry in broker database 115 and routes these merchants service updates to interested registered shoppers via suitable communication means, for example electronic mail (e-mail). In one embodiment, the broker network site 100 customizes and dynamically displays the requested service updates on the shopper browser as a personalized GUI, for example a web page, upon the next accessing of the broker network site 100 by the shopper. The invention allows a registered shopper to centrally and easily track, request or cancel multi-merchant service updates though a single source, the broker network site.

"Product", as used herein, includes, for example: durable goods such as clothing, furniture, toys, books, and the like; "soft goods", such as computer software, which the

broker may deliver electronically to the shopper through the distributed network 125 together with an appropriate key permitting the shopper to download and execute the software, in a manner well known in the art; services, including those offered by travel agents, accounting services, ticket agencies, etc., which the broker can deliver electronically to shoppers, for example, in the form of a printable voucher stamped with a unique code, identifiable by the merchant's computing systems in exchange for the purchased services; toll subscription services, including special membership sites where the broker may deliver electronically to the shopper a unique code for access, for example, a username and password, which the shopper can use to access the merchant services under agreed upon terms, for example, for a specified time period or number of accesses.

At 210, the shopper places an order with the broker network site 100 for the selected products. The shopper places the order by reviewing his or her shopping list(s), selecting products for immediate purchase, providing payment and shipping information, e.g. credit card data and shipping address, respectively, and confirming the order as presented to the shopper. The shopping list(s) contain(s) identifying information for each product selected by the shopper in all visits to the broker and/or merchant sites over a time period whose duration may be set by the shopper. For example, the shopper may wish items in his or her shopping list to be stored indefinitely or for some fixed period of time, e.g. one year. In the former case, the shopping list provides a historical record of all items determined by the shopper to have been of interest over the course of shopping through the broker network site. In the latter case, the shopper maintains a list of only current items of interest. The shopper may specify more than one shipping address when placing an order. For example, the shopper may specify that a certain product or products are to be sent to one address

while others should be sent to another address. The shopper may also specify that a certain quantity or quantities of a product or products are to be sent to one address while others should be sent to another address.

At 215, the shopper effects complete payment for the entire order placed in 210 to the broker network site. The shopper pays the broker once for each consolidated order, even if the order consists of items from multiple merchants. Payment can be made in the shopper's native currency or a foreign currency through common modes of payment available and arranged by the broker, for example credit card, check, money order, cash, wire transfer, etc. The shopper effects payment through a variety of means, for example: by providing credit card information or bank account information to the broker's bank 165 via a micro-payment network 150 which provides an encrypted communication channel to the broker's bank, in a manner well known in the art; by sending payment in the form of check or money order in a local currency to a local authorized broker outlet; or by bringing payment in a local currency to a local authorized broker outlet.

After the broker network site receives and authenticates the payment, the broker network site automatically proceeds to place a plurality of orders, one with each merchant network site 140 corresponding to the products selected by the shopper (220). Each broker purchase order includes instructions regarding a shipping agent 130 to be used by the merchant, shipping address, which may be the shopper's own address or any other valid address indicated by the shopper in the order, for example the address of a local authorized broker outlet, and terms of payment.

At 225, each merchant network site 140 sends an order response to the broker network site via the distributed network 125. The order response may indicate an order

confirmation with other order details, for example estimated time to fill an order and/or changes for example, price, product description, shipper which requires the broker and shopper attention and instruction. The purchase order may be revised one or more times until the merchant can confirm the purchase order or the shopper cancels the order.

At 230, the broker network site automatically updates order records in the broker database 115 and sends one or more order confirmations via the distributed network 125 to the shopper 120 to confirm the placement of each order with the corresponding merchant network sites.

At 235, each merchant operating a merchant network site 140 transfers the products specified in an order to the shipping agent 130 and provides a tracking number for the shipment to the broker network site.

At 240, the broker delivery tracking system, driven by an order tracking application on broker application server 110, starts to track delivery status of each order by accessing the shipper's own tracking system and updating delivery information on a regular basis, for example when the registered shopper logs in to the broker network site 100. Alternately, the shipper's tracking system may access the broker delivery tracking system and 'push' the delivery status information to the broker system. The broker delivery tracking system may also alert the shopper if requested when there is delivery status available for viewing.

At 245, the shopper, having logged into the broker network site 100, may monitor the progress of order delivery for all orders through the broker network site 100. The shopper may access his or her current orders on the broker network site and may selectively pick any or all of the pending current orders listed by order date, order name, and/or a unique order number, and/or request to view the delivery status of order items under the

selected order, without having to obtain or input tracking numbers or access any shipper network sites. The shopper may also download current and past order details to his or her computer in popular spreadsheet formats, e.g. Microsoft Excel or Lotus Notes. A novel online delivery status viewer then allows the shopper to view order delivery status in a combined multi-merchants, multi-shippers format on a single form, e.g. a GUI, such as web page, from a single source, i.e. the broker network site 100. The shopper can selectively pick one or more order items, for example, urgent and gift order items, from any of the current orders and copy them to a temporary top priority tracking list. As a special broker network site service, a service icon provides the shopper a quicker, easier and closer monitoring of the delivery status of the items in the top priority tracking list with a single click. The shopper may add or remove order item(s) from this special list, for example when delivery is completed. Moreover, the broker delivery tracking system can also alert the shopper, for example via an e-mail or a wireless messaging system, when ordered products are ready for collection at designated outlets.

At 250, when all products ordered by the shopper have been delivered, the broker pays all involved merchants and shippers through commercial payment arrangements known in the art. Conversely, payments may also be made before the delivery, depending on the negotiated terms between the respective parties.

Figure 3 shows an embodiment of a process illustrating the use of the universal shopping cart and shopping list. A registered shopper 120 logs in at 300 to the broker network site 100 through the distributed network 125. The registered shopper logs in using methods well known in the art, for example by providing a username and password, which is subsequently verified. Unregistered shoppers, for example persons new to the broker-

mediated transaction system of the present invention, may view information regarding the system and access merchant network sites to view content thereon. However, unregistered shoppers may neither place orders through the broker network site nor use other aspects of the system, for example the shopping list feature, and are prompted to register by providing relevant information, as described previously. Registered and unregistered shoppers alike may view, through the broker network site 100, content relating to products displayed on the broker network site 100 and merchant sites 140. After the registered shopper has logged in to the broker network site, the shopper is allowed access to the various brokering services, which may be presented in a number of ways, for example with icons and drop-down list, as described previously.

At 310, the shopper may choose to browse the content at the broker network site. The shopper may also perform a product search and compare the prices for similar products offered by different merchants. Alternatively, the shopper may select a merchant site by, for example, clicking on a corresponding icon, for example the emblem or logo of the merchant or the result of a merchant or product search, thereby activating a link to the corresponding merchant network site. When a shopper browses a merchant site, a broker content frame displaying icons and drop-down menus representing the various accessible broker services is simultaneously displayed with the merchant content frame on the user's computer screen or wireless phone display for the shopper to view. Clicking on the appropriate broker service icon will also lead the shopper back to the broker network site. At 315, the shopper browses the content of the network sites and performs product searches in a manner well known in the art, without logging off from the broker network site 100.

At 320, the shopper gathers a product displayed on the network site. In a preferred embodiment of the present invention, the product information is gathered by the broker shopping cart application according to the following process. The shopper first positions the cursor over a product object, such as an icon, and perform a prescribed key stroke sequence, for example, holding down "shift" key and clicking the left button of the mouse to gather the embedded URL of the product information source. The shopper then places the cursor over a shopping list icon and performs another prescribed key stroke sequence, for example, holding down a 'shift' key and clicking the left button of the a mouse to trigger the downloading of the embedded URL of the product information source at the merchant network site 140 to the targeted shopping category in the shopper's shopping list stored in the database 115 at the broker network site 100. Shopping cart application components at both the merchant and broker network sites allow the shopper to gather selected product information from the merchant network site 140 and download it to his or her shopping list, and/or directly to the categories within the shopping list.

The shopping cart application allows the shopper to add selected product information, once gathered from the merchant network site, to different categories within the shopping list without repeatedly gathering the same product information from the merchant network site.

The shopping cart application also automatically gathers and stores relevant details regarding the selected product at 325, for example product and merchant identification information that provide the broker order processing application resident on the broker application server 110 a complete set of transaction data required to process orders with merchants corresponding to the order placed by the shopper. The product and merchant-

identification information may include, for example, a merchant identifier which identifies the name of the merchant and geographic area or zone in which the merchant is located, and product information such as dimensions, weight, and fragility in order to enable an order processing application on the broker application server 110 to generate a consolidated order complete with shipping costs, taxes and duties.

Each registered shopper may create, view, modify, and/or store his or her shopping list(s) through the broker network site 100. The shopping list may be subdivided into categories which may be personalized by the shopper. The shopping cart application allows the shopper to gather product information from different merchants and deposit the product information into the appropriate categories within the personalized shopping list. Each shopping list is retained in the broker database 115 after the shopper logs off from the broker network site 100 and may be retrieved when the shopper subsequently logs in again.

In a preferred embodiment, a product update application resident on the broker application server 110 automatically verifies the product information stored in each shopping list at appropriate time intervals with each merchant and updates any changes to the shopping list, for example price and availability. The product update application also generates an alert regarding any changes discovered, which the shopper may view whenever he or she subsequently logs in to the broker network site 100. Moreover, the shopper may request immediate verification of the product information for a selected product, for example, price and availability, prior to submitting the selected product to the broker for order processing.

At 330, the shopper may continue to browse, access another merchant network site, or visit other sites that are not part of the network of registered merchants, access the

shopping list to generate a consolidated purchase order, check delivery status, or search and reorder item from a past order.

Turning now to Figure 4, an embodiment of a exemplary process present invention whereby a shopper places an order will now be described. At 400, the registered shopper accesses his or her shopping list through the broker network site 100. The shopper then selects and/or de-selects from among the products on the shopping list those products which he or she wishes to order (405), making appropriate choices for delivery service level required and preferred payment arrangement for any import taxes, duties etc., and submits a preliminary order using the broker shopping cart. At this stage, the shopper may also request a consolidated order showing product prices in the original currencies specified by the merchants. Accordingly, all cost associated with a product correspond to the original merchant-specified currency. In one embodiment, product price is shown in both the merchant's native currency and the shopper's native currency, along with the current exchange rate.

The shopper may select products from any categories within the shopping list and from current and past orders for addition to a preliminary consolidated order for the order processing application to generate a consolidated order. The shopper may optionally personalize the consolidated order by giving it a name, for example "graduation gifts for Mark", which the shopper can subsequently refer to in locating past and current orders on the broker network site.

The order processing application on the broker application server 110 then generates a consolidated order for all the products selected by the shopper from data records in the broker database 115 and calculates the cost of the total order, including applicable

exchange rates, shipping costs, duties and taxes (410). The order processing system determines the lowest shipping costs by comparing rates negotiated by the broker with several shippers and the shipping rates offered by the merchant, and provides the lowest shipping costs to the shopper based on the shipping service levels requested by the shopper (for example, express delivery, standard delivery, etc.).

According to the present invention, exchange rates are determined and managed in consultation with major financial institutions, especially those with whom the broker has established the various payment method gateways. Shipping cost schedules with different shippers for various sectors, e.g., geographic regions, are pre-negotiated, while duties and taxes are based on government schedules. Foreign exchange rate information, shipping zone schedules and local tax and duty schedules are stored in the broker database 115 and consulted during order cost calculation. Examples of local taxes include federal or national, state, provincial, municipal, VAT, etc. An advantage of the present invention lies in the fact that the broker network site calculates all fees which will be assessed in addition to the product price offered by the merchant, so that the merchants need not trouble themselves with calculating and providing such information. A tax and duty application which works in conjunction with the order processing application is responsible for calculating the local taxes and duties on ordered products. The tax and duty application retrieves relevant information from tax and duty tables in the broker database 115, as well as the shopping list and merchant data records, in order to calculate total taxes and duties based on the products ordered and the shopper's designated shipping address. The order processing application, in cooperation with the tax and duty application, recognizes dutiable items and calculates estimated duties. For example, product identification codes used by

merchants may provide Harmonized Tariff Schedule codes. The shopper is afforded the option of paying the duty portion of the total order cost at order placement or upon delivery. If the duties are paid only on delivery, the products may be held at an authorized broker outlet until payment is made.

The order processing application also creates a record in the broker database 115 corresponding to the shopper's order. This record will be updated at each stage in the processing of the order until delivery of all items in the shopper's order has been confirmed or until the order is cancelled.

The shopper is then prompted (415) to select a payment mode which may consist of various online options, for example credit card, internet banking, electronic checks and various offline options, for example check, certain ATM cards, stored value cards, debit cards, cash etc, accepted at various offline payment processing centers such as authorized broker outlets and self service payment ATMs etc. The shopper then selects a payment mode at 420 and effects payment to the broker. The order processing application, in cooperation with a payment processing application and order tracking application, then authenticates the payment, confirms the order with the shopper and issues an invoice with a unique identification number (order ID) that may be used as an order tracking number by the shopper (425). The corresponding order record in the broker database 115 is updated accordingly. If the shopper effects payment at 420 via credit card, then payment authentication may take the form of receiving authorization from the credit card issuer, in a manner well known in the art.

According to the present invention, fraudulent use of credit cards may be prevented, for example, by asking the shopper to present a credit card for payment at an authorized broker outlet and verifying the shopper's signature.

The shopper may elect a number of other payment modes in addition to payment by credit card which may be convenient, particularly in countries outside of the merchant's country of origin, and which may also have the added advantage of reducing risks due to credit card fraud by unauthorized card users. Accepting local currencies as payment for products ordered through the broker network site 100 renders e-commerce more viable in countries outside the merchant's country of origin, since the aggregation of payment receipts from shoppers and the payables to merchants within a market minimizes unnecessary and redundant financial losses due to foreign exchange and remittance costs. Moreover, accepting local currency via local online payment methods such as through internet banking and offline payment methods such as check, money order, cash or equivalent allows heretofore marginalized shoppers in many countries to participate in online shopping, which has hitherto required payment almost exclusively by credit card.

Shoppers may make offline payment in full with a temporary invoice generated by the order processing system at local authorized broker outlets. Alternatively, the shopper may effect payment, again using local currency, at a local automated payment machine, in much the same manner as one might deposit a check into one's bank account through an automated teller machine (ATM). According to the present invention, after the broker is satisfied that the shopper payment is authorized and/or received in full, the system generates a final invoice with a unique order ID and transmits the final invoice to the shopper. The unique order ID generated by the broker for the shopper's invoice also serves

as the broker's purchase order number to each merchant specified in the consolidated order placed by the shopper. The unique order ID may also serve as a tracking number for the products shipped from each merchant, depending on the individual tracking system of the shipper making the delivery. In another embodiment, the merchant may submit to the broker delivery tracking application a tracking number for each shipment generated by the shipper, e.g. an airbill number.

At 430, the order processing application on the broker application server 110 places the order with each merchant operating a merchant network site 140 specified in the shopper's consolidated order and adds the merchant orders to the broker database 115 as part of the order record created earlier (430). A separate order is placed via the distributed network 125 with each merchant for all products ordered from that merchant. Each order may be encrypted using techniques well known in the art. The order processing application makes possible the virtually instantaneous (allowing for delays inherent in electronic, electro-optical, and wireless processing systems suitable for use in the system of the present invention) placement of a separate order with each distinct merchant listed in the shopper's consolidated order upon authentication of the shopper's payment.

According to the invention, the broker order processing application places corresponding order(s) with at least one or several merchants 140. In one embodiment, the order processing application may effect a purchase order transaction with the merchant by transmitting required transaction data in a format consistent with the merchant's existing order form structure, as used by other shoppers to order from the merchant network site. An advantage of this embodiment is that it does not entail customization of accepted order formats at the merchant network site; the merchant processes fulfills broker purchase orders

in the same manner as orders from other online shoppers according to its existing practices. However, a merchant's transaction data transfer format may limit the use and exchange of certain broker-specific transaction data and instructions, for example unique order ID, order tracking number, and shipper choice, which may limit the capability of the automated broker order processing application. In a preferred embodiment, data exchange and communication mechanisms are customized for increased connectivity between the broker network site 100 and merchant network sites 140 through the distributed network 125. Broker software components 144 installed on each merchant network site 140 as part of the merchant registration process enable several processes to be carried out. For example, the merchant may use a customized broker electronic purchase order arrangement to receive orders. Personal shopper information, such as shopper payment information and shopper e-mail address are not given to the merchant, except for the shopper's name and address, if the shopper has requested direct-home delivery. No immediate payment is made to the merchant, nor are payment details transmitted to the merchant at the time of order. Instead, the broker arranges to pay the merchants separately through a pre-arranged commercial payment arrangement. In this embodiment, the broker designs and installs the necessary software components on the broker and merchant network site network and application servers, according to the merchant network site's platform and architecture, networking security implementation and other system requirements.

The customized broker purchase transaction data exchange and structured broker-merchant communication mechanisms of the present invention supports additional features. For example, an order confirmation sent by a merchant automatically leads to several automated responses by the broker network site 100 so as to automatically notify the

shopper of merchant order confirmation and any order changes, order status, delivery status, and pick-up time for orders delivered to an authorized broker outlet for collection by the shopper. In addition, if the shopper's response to an alert is an instruction to proceed with an order, the broker and merchant systems automatically make the necessary database updates and continue to process the order. If, on the other hand, the shopper rejects the changes and cancels the product order, the broker automatically processes a refund or credit and updates and instructs the merchant to cancel the order accordingly.

According to the present invention, the broker serves as a purchasing agent for the shopper. Upon receiving and authenticating payment in full for the shopper order prior to placing the order with any merchants, the broker assumes responsibility for the completion of the order to the shopper's satisfaction. The broker also assumes responsibility for payment to the merchant for all products shipped by the merchant. In the event that the shopper is dissatisfied with shipping or with the condition of the products upon arrival, the shopper has recourse to the broker and may file a claim by contacting an agent at a local authorized broker outlet rather than contacting the merchant directly, possibly in a foreign country, as is currently required by prior art systems. Similarly, the present invention protects merchants against non-payment by shoppers, since the broker assumes responsibility for payment to the merchant.

Figure 5 illustrates an embodiment of a process whereby a broker order is processed by a merchant and amended and/or cancelled and/or continued and completed. At 500, a merchant receives an encrypted order from the broker network site 100 and decrypts the order using a previously agreed upon decryption protocol, as is known in the art. At 505, the merchant reviews the broker electronic purchase order and responds to the broker, for

example with a broker-specified electronic order response form generated with the broker software components 144. If the order can proceed under the original terms and conditions indicated to the shopper, the merchant confirms the order using the order response form and proceeds to process the order. At the same time, the broker network site 100 updates order records in the database 115, if required, and automatically notifies the shopper that the order is confirmed, for example via electronic mail or a message to the shopper's mobile phone, if applicable.

In addition to using encryption in transmitting the purchase order to the merchant, the broker also authenticates the order response received from the merchant as an extra security measure. In an embodiment, the order response is authenticated by comparing the order ID indicated in the merchant order response and the Internet Protocol (IP) address deciphered from the transmission from merchant to broker with the order ID of the corresponding order record stored in the broker database 115. The broker order processing application automatically alerts the broker and merchant network sites if any discrepancy is detected.

In addition, if the broker network site 100 does not receive an order response from the merchant network site 140 regarding the broker purchase order within a predetermined interval, the broker network site 100 automatically notifies the merchant network site 140.

At 510, the merchant processes the broker order and delivers the product(s) specified in the order to the shipper designated in the instructions accompanying the purchase order placed by the broker order processing application with the merchant. Optionally, the designated shipper may provide the merchant with a tracking number for the order shipment, or the order ID provided by the broker may be used.

At 515, the merchant provides the tracking number to the broker network site, for example using a broker-specified electronic delivery response form generated with the broker software component 144. The tracking number may be the order ID, which is also used as the unique order ID on the invoice provided to the shopper. If a shipper uses its own tracking system and transmits its own tracking number to the merchant for subsequent transmission to the broker order tracking application, the broker tracking application matches the tracking number to the unique order ID, updates the order record in the database 115 accordingly, and the order tracking application is set to receive delivery status updates.

In an embodiment of the present invention, if the broker network site 100 does not receive a delivery response from merchant network site 140 regarding the delivery of the broker purchase order within a predetermined time interval, the broker order tracking application automatically sends a reminder to the merchant network site 140.

In another embodiment, whenever a registered shopper logs in to the broker network site 100, the broker order tracking application automatically accesses shipper network sites 130 to retrieve the latest delivery status information for the shopper's order(s) and stores the information on the broker database 115 for quick access when requested by the shopper. Thus, according to the invention, the broker network site 100 allows the shopper to access and view the delivery status of all the outstanding orders stored in the broker database 110 by simply logging in to a single network site, namely the broker network site 100.

At 520, the broker order processing application automatically evaluates the merchant order response and identifies any required changes or notice of change to the details of order fulfillment, for example a change in the shipper or an expected delay in

completing the order. If the change requires action only by the broker, for example in situations where the change indicated by the merchant does not affect the service levels to the shopper, for example, a change in broker-approved shipper, the broker revises the purchase order, updates the broker database 115, and transmits the revised purchase order to merchant network site 140. If the change requires decision by the shopper, for example because an ordered product is back-ordered or discontinued, at 525, the broker network site 100 automatically alerts the shopper and requests instructions or a decision from the shopper. If the change, for example, expected delay in completion of the order by the merchant, is acceptable, the broker will revise the purchase order, update the broker database 115, and transmit the revised purchase order to the merchant network site 140. Alternatively, the shopper may request to cancel the order at 535, whereupon the broker order processing application processes a refund or a credit, updates the broker database 115, and notifies the merchant to cancel the order. At all stages in the process described in Figure 5, the broker order tracking application updates the correct order record in the broker database 115 to reflect the status of the shopper's order and the corresponding broker's order(s) to the merchant(s).

Figure 6 shows an exemplary delivery process mediated by the broker network site 100. The broker arranges the delivery and is able to ascertain the best method of delivery according to a wide variety of circumstances at the destination to ensure that delivery can be made safely and securely to the correct recipient. For example, the broker may require a shopper to collect a shipment in person at an authorized broker outlet.

At 600, the shipper 130 accepts one or more products from a merchant operating a merchant site 140 and provides to the merchant the appropriate tracking number for the

shipment. According to instructions included in the order previously placed by the broker order processing application with the merchant network site 140, a first shipper at step 605 delivers either directly to the shopper or to another location designated by the broker, for example a local authorized broker outlet or another shipper's pick-up point. If shipment is direct to shopper, the shopper accepts delivery of the products and acknowledges receipt with the shipper (610) in a manner well known in the art, for example through signature and/or bar code scanning of an address label on the shipping package. The shipper then updates its own tracking system (615) and optionally notifies the broker network site 100 of delivery, for example by transmitting a delivery completion notice, whereupon the order record in the broker database 115 is updated accordingly and marked as complete by the order processing application in cooperation with the order tracking application (635).

If, at 605, the shipment is not direct to shopper, but rather, for example, to a transfer point for another broker designated shipper, then the broker or appointed local shipper at 620 may receive the ordered product(s). If the order instructions indicate that the local shipper should deliver the product(s) to the shopper (610), then the local shipper shopper may receive the product(s) from the local shipper at 615. Otherwise, the broker alerts the shopper, for example via electronic mail, automated telephone message, or message to the shopper's mobile phone, that the product(s) are ready to be picked up either at an authorized broker outlet or a local shipping agent outlet, as indicated in the instructions made in the original order (625). If the shopper has elected to pick up the product(s) at an authorized broker outlet or local shipping agent, the broker order processing application automatically creates and sends to the shopper, for example via e-mail, a form containing relevant order information which the shopper may present upon product pick-up to ensure

safety and rightful delivery of the product(s) according to local consumer purchasing by-laws or practices. The shopper then accepts the delivered product(s) and acknowledges receipt (630), whereupon the order processing application and tracking application update the order status (635).

Figure 7 shows an embodiment of a process whereby the broker pays merchants and shippers for services rendered on a predetermined basis, for example by date or when a credit limit is reached or by other appropriate measures agreed upon between the broker and merchants and broker and shippers. The terms of payment are stored in contract data records stored in the broker database 115. At 700, a payment processing application on the broker application server is programmed to regularly check if payables are due and calculates payments to the merchants and shippers in their native currencies, for example, U.S. Dollars, Japanese Yen, etc., as appropriate. If a payment is due to a merchant or shipper, the payment processing application at 705 extracts and processes the payment due and generates preliminary reports and payment schedules after checking the various currency balances at the broker's bank(s) 165. After the payment schedules and currency conversions have been carefully checked and verified, the payment schedule is electronically authorized at 710 and electronically and securely transmitted to the broker's bank(s) for processing. The payment processing application then transmits a notice including details of the payment made to the merchants and shippers. At the same time, the payment processing system sends an authorization to the broker's bank(s) 165 to transfer payment via the commercial payment network 155 to the merchant's bank 170 and shipper's bank 175 (715).

Referring now to Figure 8, an embodiment of a process is shown whereby shopper shopping list is updated automatically in response to product information supplied by merchants. The merchants may, of their own accord, send information to the broker network site 100 via the distributed network 125 regarding products displayed on the merchant network site 140 and/or broker network site 100, for example price change, temporary unavailability, and/or discontinuation of a product line (800). A product update application on the broker application server 100 automatically matches the received product information with a shopping list in the broker database 115 containing those products and updates the shopping list record accordingly (805). A report generation application on the broker application server then alerts the shopper of the changes to his or her shopping list, for example via an automated electronic mail message or wireless phone message, or for example by a message viewed by the shopper upon subsequent log-in to the broker network site (810).

The broker-mediated transaction system of the present invention may comprise, in addition to the aspects mentioned in the foregoing, physical authorized broker outlets in various locations worldwide. The authorized broker outlets may be operated by the broker who operates the broker network site 100 or the broker's representatives, or the outlets may be operated by authorized representatives, for example on a franchise basis. The outlets are intended to be near customers, in particular near customers in countries not heretofore serviced extensively by online merchants. The outlets provide personal services for customers such as permitting "off-line" payment, e.g. by cash, check or money order. Outlets may also showcase merchants' products which shoppers may optionally buy "off the shelf". In this way, the authorized broker outlets may serve as local retail outlets for the

merchants whose products may also be viewed through the broker network site. The present invention bridges the gaps in trust, recognition, and payment practices between shoppers and merchants around the world. For example, since the broker serves as the shopper's purchasing agent, thereby accepting responsibility for satisfactory completion of the shopper's order, the broker-mediated transaction system and method of the present invention provide shoppers an avenue to seek recourse and remedies if the services or the product quality provided by merchants do not meet their expectations.

The inventors are not aware of any commercially viable membership-driven consumer commerce system which contains the above features, addresses the shortcomings of the prior art and offers both shoppers and merchants tremendous benefits in the ways describe above.

Various preferred embodiments of the invention have now been described. While these embodiments have been set forth by way of example, various other embodiments and modifications will be apparent to those skilled in the art. Accordingly, it should be understood that the invention is not limited to such embodiments, but encompasses all that which is described in the following claims.

What is claimed is:

1. A broker-mediated online shopping method comprising:

providing access to a broker network site through a distributed network to enable viewing of first content on the broker network site;

providing access to at least one merchant network site through the broker network site to enable viewing on the broker network site of second content from the at least one merchant network site;

gathering and storing selectively from the first content and the second content first information regarding a first at least one product;

receiving a first order for a second at least one product based at least in part on the first information;

receiving payment for the first order and assuming responsibility for completion of the first order;

generating and placing at least one purchase order based on the first order for a first at least a portion of the second at least one product and assuming responsibility for payment of the at least one purchase order;

receiving second information regarding fulfillment of the at least one purchase order;

providing third information based on the second information regarding fulfillment of the first order;

receiving fourth information regarding shipment of a second at least a portion of the second at least one product;

updating based on fifth information provided by at least one shipper a delivery status for the second at least a portion of the second at least one product;

providing sixth information regarding the delivery status; and

effecting payment for the at least one purchase order.

2. The method according to claim 1, wherein each of the broker network site and the at least one merchant network site is an Internet web site and the distributed network is the Internet.

3. The method according to claim 1, wherein the providing access to the at least one merchant network site includes requiring log-in by a shopper to the broker network site only once during an interaction session between the shopper and the broker network site.

4. The method according to claim 3, wherein the shopper provides personal information only to the broker network site and remains anonymous to the at least one merchant network site.

5. The method according to claim 1, wherein the first content is based at least in part on the second content.

6. The method according to claim 1, wherein the first content includes a shopping list.

7. The method according to claim 1, wherein the first content includes the third information and the sixth information.

8. The method according to claim 1, wherein the first information comprises a first at least one embedded universal resource locator (URL) corresponding uniquely to the first at least one product.

9. The method according to claim 8, wherein the gathering and storing first information comprises capturing the first at least one embedded URL and storing the first at least one embedded URL in a storage device.

10. The method according to claim 9, wherein the storage device is a database controlled by the broker network site.

11. The method according to claim 1, wherein the first order includes a second at least one embedded URL corresponding to the second at least one product.

12. The method according to claim 11, wherein the at least one purchase order comprises a third at least one embedded URL corresponding to the first at least a portion of the second at least one product.

13. The method according to claim 1, further comprising generating an invoice corresponding to the first order with an invoice identification code corresponding uniquely to the first order.

14. The method according to claim 13, wherein the generating an invoice includes calculating estimated local taxes, duties, and shipping costs in a local currency.

15. The method according to claim 1, wherein the payment for the first order is received through the distributed network.

16. The method according to claim 1, wherein the payment for the first order is received through an offline payment processing center.

17. The method according to claim 16, wherein the payment is received in a local currency.

18. The method according to claim 1, wherein the fourth information includes a tracking number corresponding to the second at least a portion of the second at least one product.

19. The method according to claim 1, wherein the fifth information includes a first update on a time dependent position of the second at least a portion of the second at least one product.

20. The method according to claim 1, wherein the at least one shipper receives the second at least a portion of the second at least one product from the at least one merchant network site.

21. The method according to claim 20, wherein the at least one shipper delivers the second at least a portion of the second at least one product to a shopper at an address specified by the shopper.

22. The method according to claim 20, wherein the at least one shipper delivers the second at least a portion of the second at least one product to at least one local shipper for subsequent delivery by the at least one local shipper to a shopper at an address specified by the shopper.

23. The method according to claim 1, wherein the sixth information includes a second update on a time dependent position of the second at least a portion of the second at least one product.

24. The method according to claim 1, further comprising:
evaluating the second information;
requesting first instructions in response to the third information; and
providing second instructions based on the first instructions.

25. The method according to claim 1, wherein the effecting payment comprises:

calculating a first at least one amount owed to the at least one merchant in a first local currency corresponding to the at least one merchant and a second at least one amount owed to the at least one shipper in a second local currency corresponding to the at least one shipper;

checking at least one bank balance corresponding to the broker network site and generating a first at least one payment schedule corresponding to the first at least one amount owed and a second at least one payment schedule corresponding to the second at least one amount owed;

approving the first at least one payment schedule and the second at least one payment schedule; and

transferring a first at least one payment to the at least one merchant and a second at least one payment to the at least one shipper.

26. The method according to claim 1, further comprising:

receiving an automatic update regarding at least a portion of the second content;

modifying at least a portion of the first content corresponding to the at least a portion of the second content; and

providing an alert regarding the modified at least a portion of the first content.

27. A broker-mediated online shopping system comprising:

a broker network site having a broker network server operably coupled to a broker application server and to a broker storage device operably coupled to the broker application server;

an access rights application executable by the broker application server for controlling access to the broker network site and for providing, to a shopper logged in to the broker network site through a distributed network, access to first content from a first at least one merchant network site displayed on the broker network site and to second content displayed on the broker network site, wherein the second content is based at least in part on the first content;

a shopping cart application executable by the broker application server for selecting first product information from the first content and second product information from the second content and for storing the selected first product information and the selected second product information in a shopping list in the broker storage device;

an order processing application executable by the broker application server for processing a first order received from the shopper through the distributed network and at least one second order based on the first order placed by the broker network site with a second at least one merchant network site through the distributed network;

a payment processing application executable by the broker application server for processing a first payment received from the shopper, at least one second payment to the second at least one merchant network site, and at least one third payment to at least one shipper;

an order tracking application for monitoring and updating a first status of the first order and a second status of each at least one second order in response to first information received from the second at least one merchant site and second information received from the at least one shipper;

a tax and duty calculation application for calculating an amount of taxes, duties, and tariffs applicable to the first order;

at least one shopper browser in communication with the broker network site through the distributed network; and

first broker software executable on a computer system and operably coupled to the at least one shopper browser for processing first data;

wherein the at least one merchant network site comprises a merchant network server operably coupled to a merchant application server, to a merchant storage device operably coupled to the merchant application server, and to second broker software executable on a computer system for processing second data.

28. The system according to claim 27, wherein the shopping cart application captures a first embedded universal resource locator (URL) from the first content and adds the first embedded URL to the shopping list.

29. The system according to claim 27, wherein the shopping cart application captures a second embedded universal resource locator (URL) from the second content and adds the second embedded URL to the shopping list.

30. The system according to claim 27, wherein the shopper provides personal information only to the broker network site and remains anonymous to the at least one merchant network site.

31. The system according to claim 27, wherein the first order is based on the shopping list.

32. The system according to claim 27, wherein the broker storage device is a database.

33. The system according to claim 27, wherein the first payment is received through the distributed network.

34. The system according to claim 27, wherein the first payment is received through an offline payment processing center.

35. The system according to claim 34, wherein the offline payment processing center is an authorized broker outlet.

36. The system according to claim 34, wherein the offline payment processing center is a self-service ATM terminal.

37. The system according to claim 27, wherein the first payment is in a local currency chosen by the shopper.

38. The system according to claim 27, wherein the second content includes third information regarding the first order and fourth information regarding completed shopper orders previously processed by the broker network site.

39. The system according to claim 38, wherein the first order is based at least in part on the fourth information.

40. The system according to claim 38, wherein the third information includes the first status.

41. The system according to claim 27, further comprising a product update application for processing updated first product information received from the at least one merchant site.

42. The system according to claim 41, wherein the product update application automatically updates the shopping list.

43. A computer-readable medium including instructions for enabling a method of broker-mediated online shopping, the method comprising:

providing access to a broker network site through a distributed network to enable viewing of first content on the broker network site;

providing access to at least one merchant network site through the broker network site to enable viewing on the broker network site of second content from the at least one merchant network site;

gathering and storing selectively from the first content and the second content first information regarding a first at least one product;

receiving a first order for a second at least one product based at least in part on the first information;

receiving payment for the first order;

generating and placing at least one purchase order based on the first order for a first at least a portion of the second at least one product;

receiving second information regarding fulfillment of the at least one purchase order;

providing third information based on the second information regarding fulfillment of the first order;

receiving fourth information regarding shipment of a second at least a portion of the second at least one product;

updating based on fifth information provided by at least one shipper a delivery status for the second at least a portion of the second at least one product;

providing sixth information regarding the delivery status; and

effecting payment for the at least one purchase order.

44. A computer implemented method of broker-mediated online shopping, the method comprising:

providing access to a broker network site through a distributed network to enable viewing of first content on the broker network site;

providing access to at least one merchant network site through the broker network site to enable viewing on the broker network site of second content from the at least one merchant network site;

gathering and storing selectively from the first content and the second content first information regarding a first at least one product;

receiving a first order for a second at least one product based at least in part on the first information;

receiving payment for the first order;

generating and placing at least one purchase order based on the first order for a first at least a portion of the second at least one product;

receiving second information regarding fulfillment of the at least one purchase order;

providing third information based on the second information regarding fulfillment of the first order;

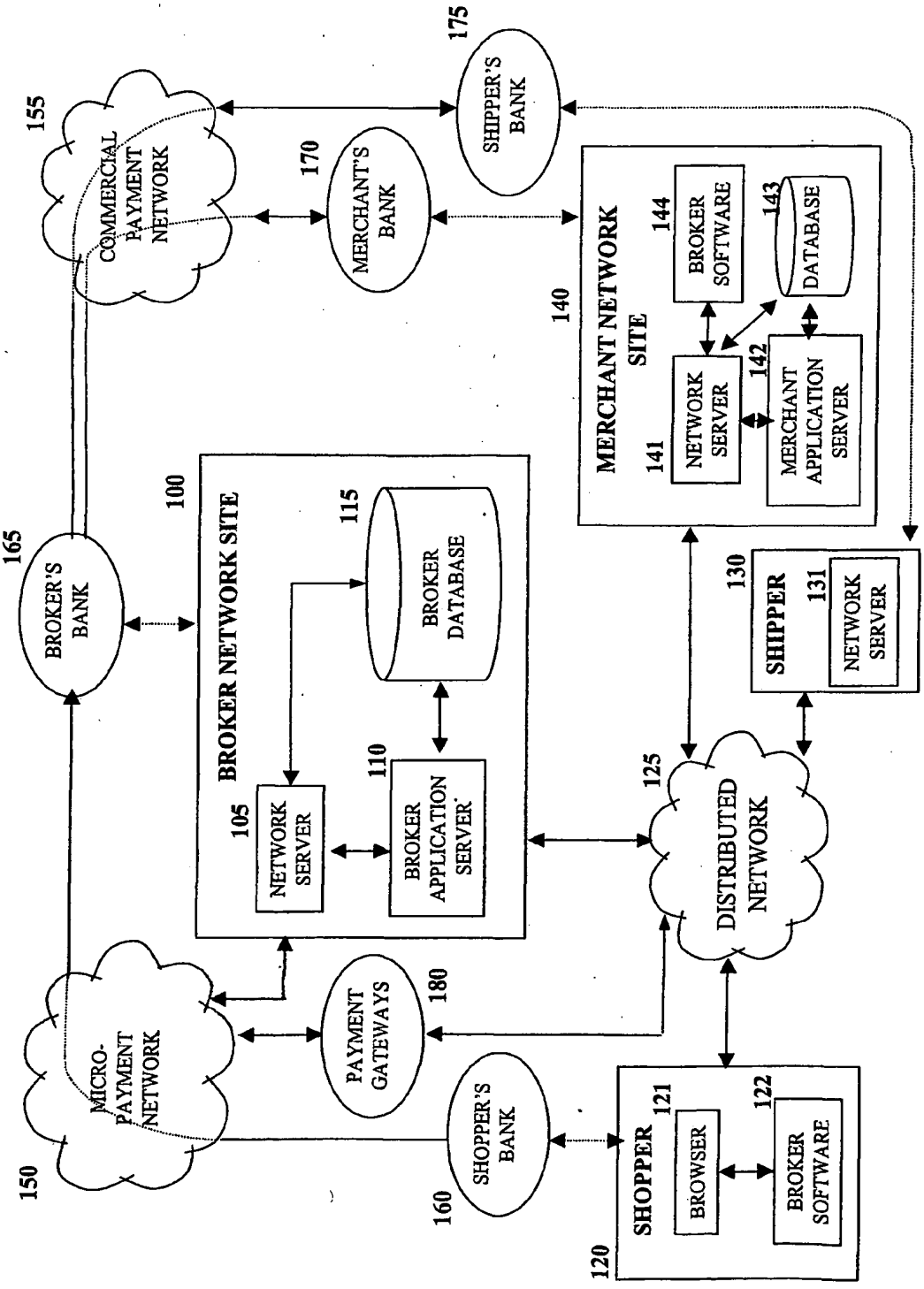
receiving fourth information regarding shipment of a second at least a portion of the second at least one product;

updating based on fifth information provided by at least one shipper a delivery status for the second at least a portion of the second at least one product;

providing sixth information regarding the delivery status; and

effecting payment for the at least one purchase order.

Figure 1


155
COMMERCIAL PAYMENT NETWORK
175
SHIPPER'S BANK
170
MERCHANT'S BANK
140
MERCHANT NETWORK SITE
144
BROKER SOFTWARE
143
DATABASE
141
NETWORK SERVER
142
MERCHANT APPLICATION SERVER
165
BROKER'S BANK
100
BROKER NETWORK SITE
115
BROKER DATABASE
105
NETWORK SERVER
110
BROKER APPLICATION SERVER
130
SHIPPER
131
NETWORK SERVER
125
DISTRIBUTED NETWORK
150
MICRO-PAYMENT NETWORK
180
PAYMENT GATEWAYS
160
SHOPPER'S BANK
120
SHOPPER
121
BROWSER
122
BROKER SOFTWARE

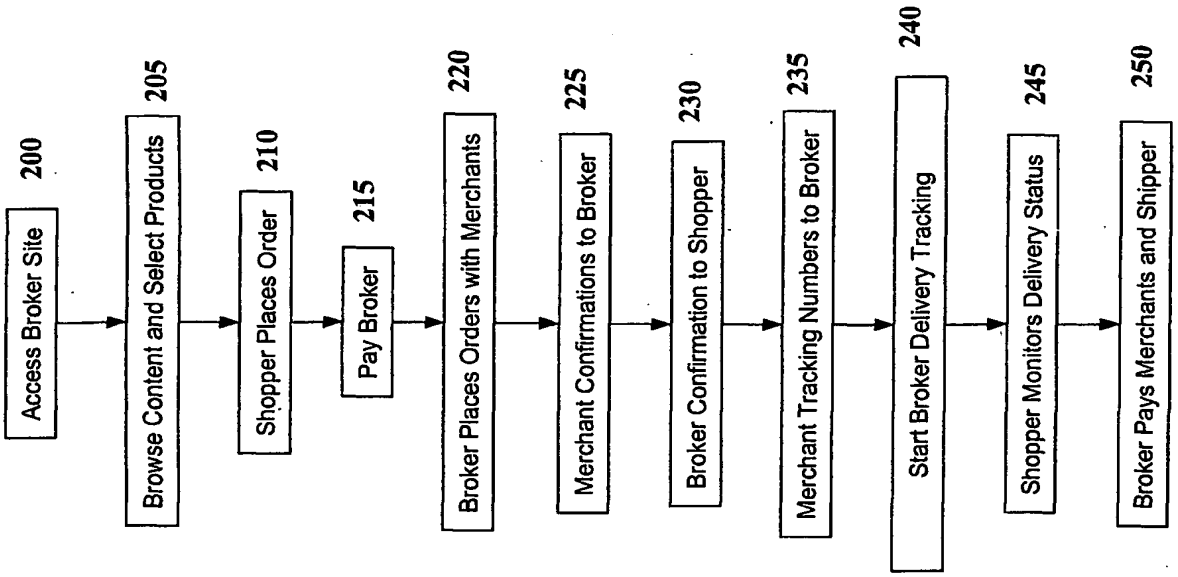

Access Broker Site
200
Browse Content and Select Products
205
Shopper Places Order
210
Pay Broker
215
Broker Places Orders with Merchants
220
Merchant Confirmations to Broker
225
Broker Confirmation to Shopper
230
Merchant Tracking Numbers to Broker
235
Start Broker Delivery Tracking
240
Shopper Monitors Delivery Status
245
Broker Pays Merchants and Shipper
250

Figure 2

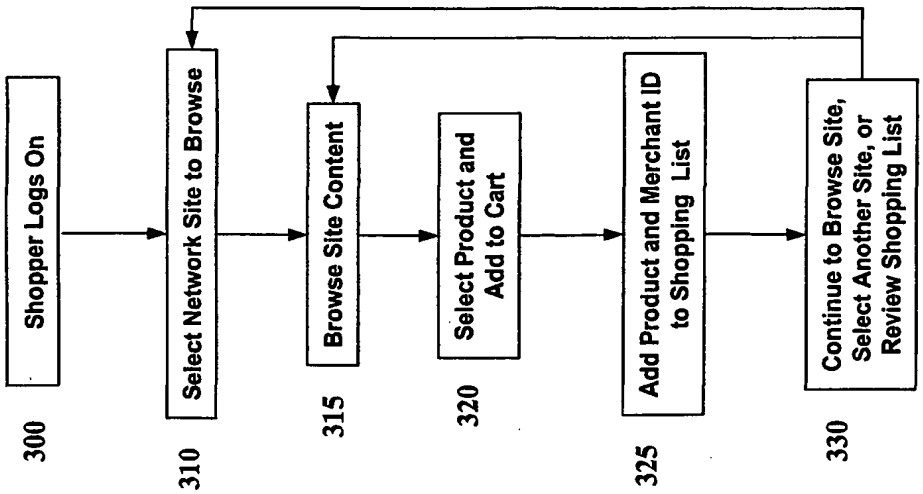

Shopper Logs On
Select Network Site to Browse
Browse Site Content
Select Product and Add to Cart
Add Product and Merchant ID to Shopping List
Continue to Browse Site, Select Another Site, or Review Shopping List
300
310
315
320
325
330

Figure 3

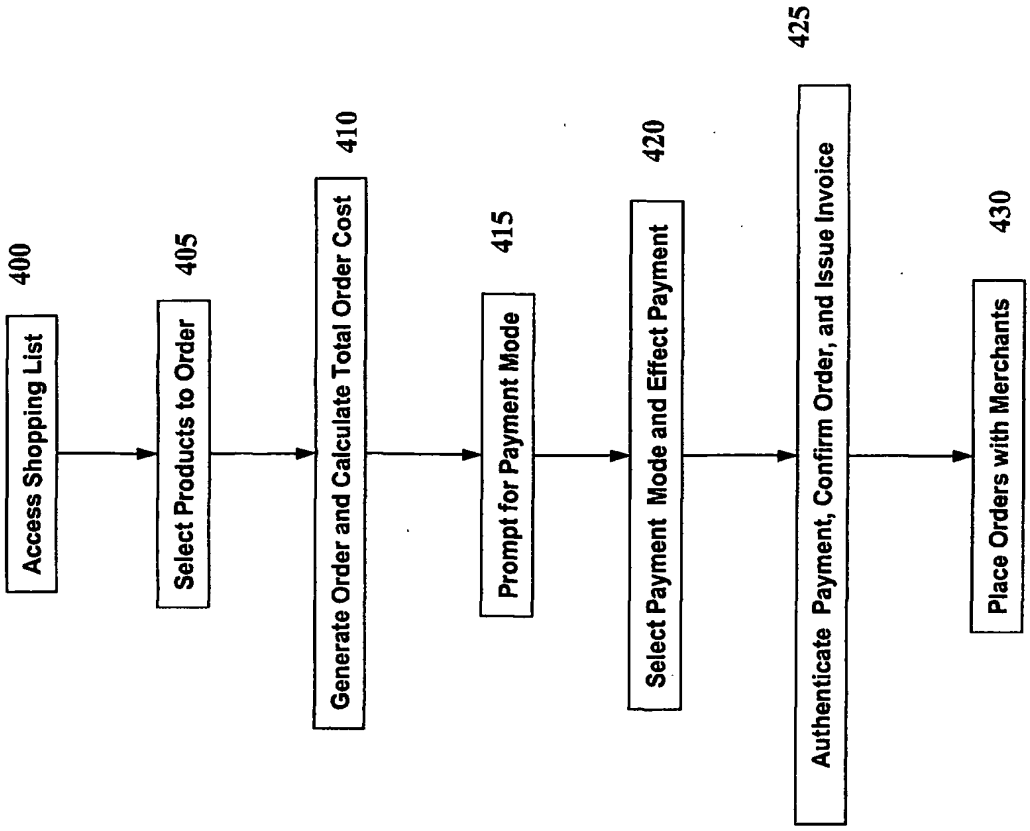
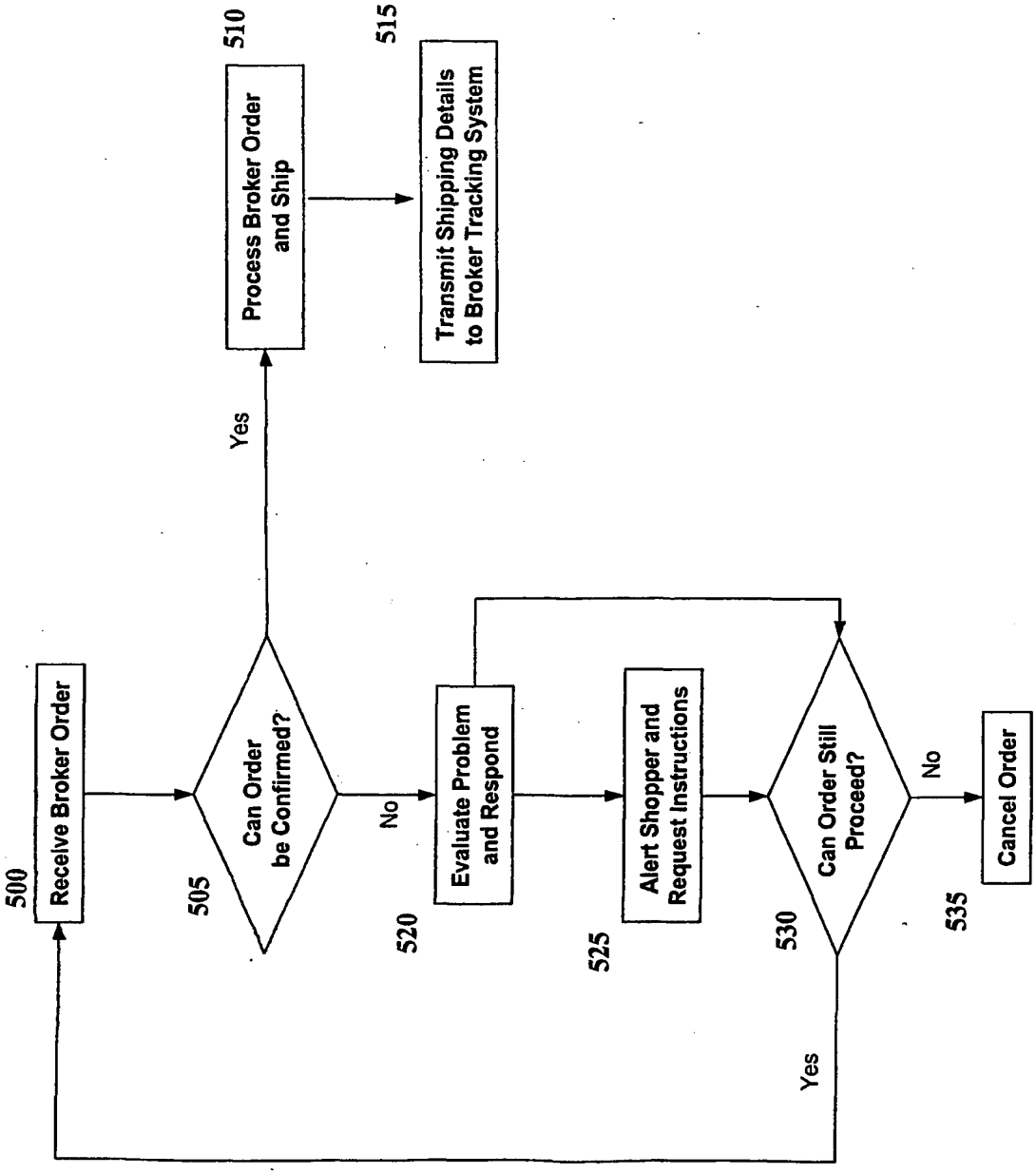

400
Access Shopping List
405
Select Products to Order
410
Generate Order and Calculate Total Order Cost
415
Prompt for Payment Mode
420
Select Payment Mode and Effect Payment
425
Authenticate Payment, Confirm Order, and Issue Invoice
430
Place Orders with Merchants

Figure 4

Figure 5


500
Receive Broker Order
505
Can Order be Confirmed?
Yes
510
Process Broker Order and Ship
515
Transmit Shipping Details to Broker Tracking System
No
520
Evaluate Problem and Respond
525
Alert Shopper and Request Instructions
530
Can Order Still Proceed?
No
535
Cancel Order
Yes

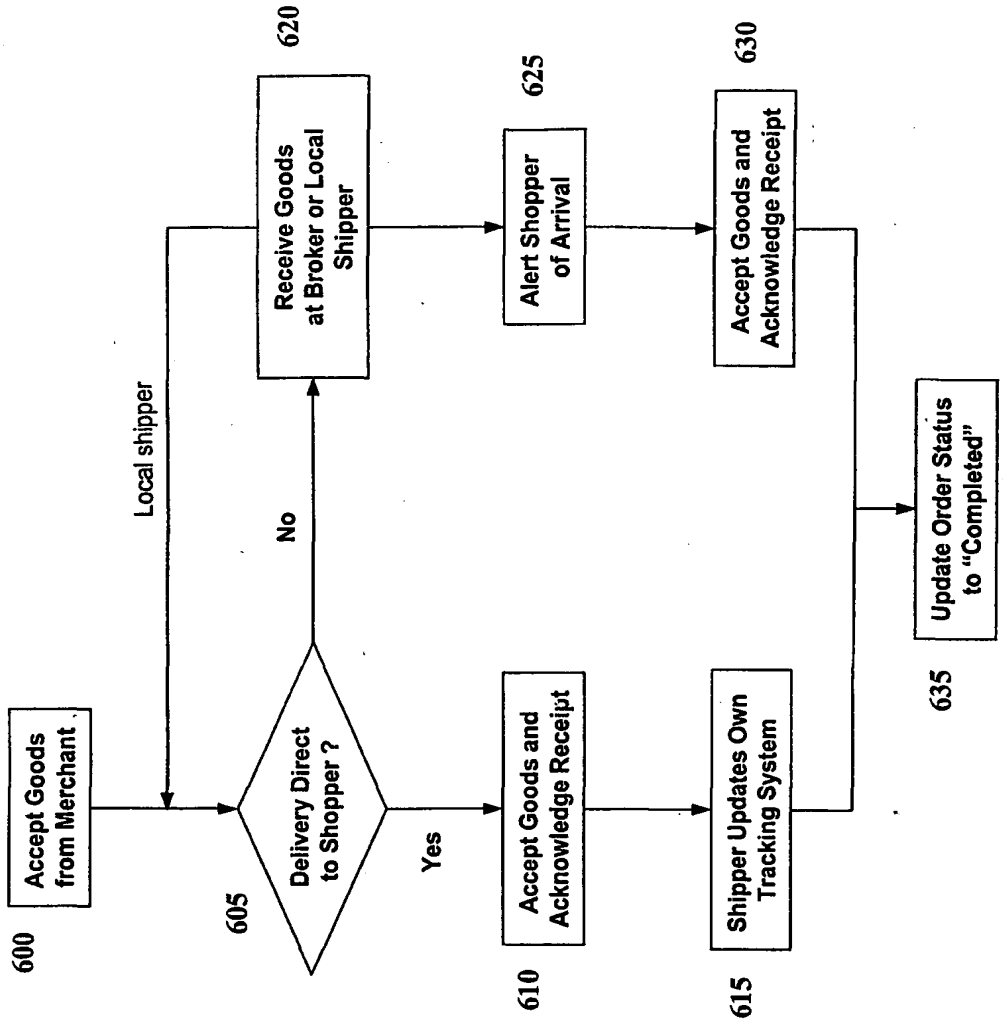

Accept Goods from Merchant
600
Delivery Direct to Shopper ?
605
Local shipper
No
Yes
Receive Goods at Broker or Local Shipper
620
Alert Shopper of Arrival
625
Accept Goods and Acknowledge Receipt
630
Accept Goods and Acknowledge Receipt
610
Shipper Updates Own Tracking System
615
Update Order Status to "Completed"
635

Figure 6

Figure 7

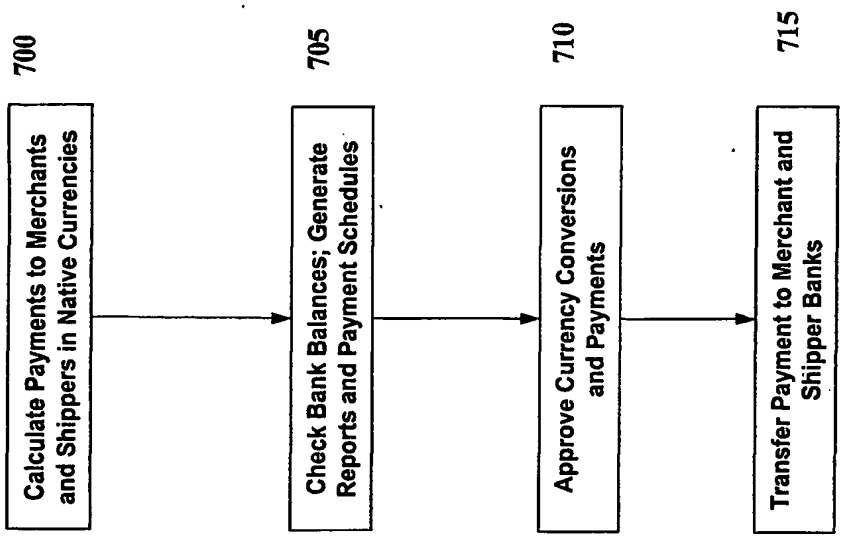
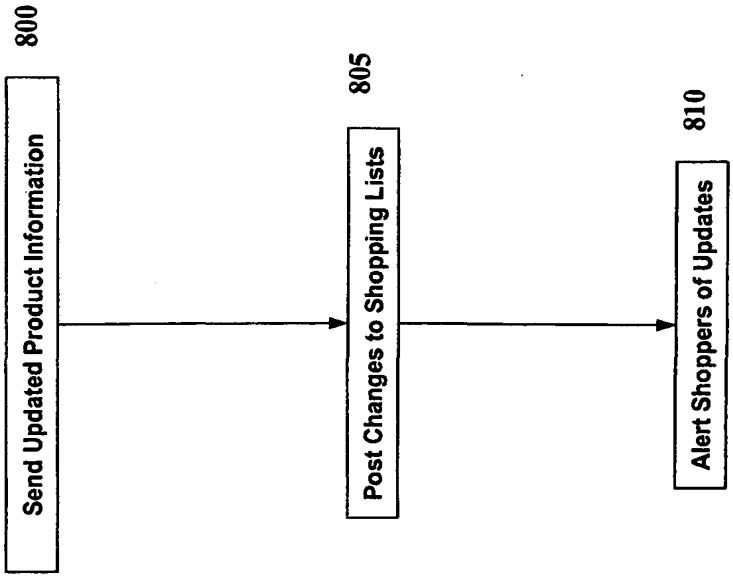

700
Calculate Payments to Merchants and Shippers in Native Currencies
705
Check Bank Balances; Generate Reports and Payment Schedules
710
Approve Currency Conversions and Payments
715
Transfer Payment to Merchant and Shipper Banks

Figure 8


800
Send Updated Product Information
805
Post Changes to Shopping Lists
810
Alert Shoppers of Updates